

<b>Office Action Summary</b>	<b>Application No.</b> 10/502,475	<b>Applicant(s)</b> BRAMATI ET AL.
	<b>Examiner</b> ALTON PRYOR	<b>Art Unit</b> 1616

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 June 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-20,27-31 and 33-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-20,27-31,33-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

Applicant's arguments filed 6/8/11 have been fully considered but they are not persuasive. Previous rejections not addressed below are withdrawn.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-20,27-31,33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al (US 5998332) and Koenig et al (WO 01/26469; 04/19/01). Sato et al suggest high concentration (100 to 600 g ae/L, col 6, lines 64-66) glyphosate compositions comprising activity enhancing surfactants (columns 8-10) such as trialkylbetaines (col 10, lines 7-12), alkyletheramines (column 8 lines 65-67), and alkyl glycosides / polyglycosides (col 8, lines 23-24, 48-50), at amounts ranging from 2 to 25% by weight (col 11, lines 1-2), with optional additives such as inorganic salts (col 11, lines 8-10: ammonium sulfate, potassium sulfate, potassium chloride, or sodium sulfate), and additional active agents such as bialaphos and glufosinate (lines 44-56).

Koenig et al suggest a composition comprising isopropylamine salt of glyphosate (abstract, page 2 lines 1-17). Koenig et al suggest the addition of surfactants including betaines derivatives and alkyl glycosides (page 4 lines 1-13). Neither of the prior art references exemplify a composition comprising an isopropylamine salt of glyphosate, trialkylbetaines,

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alkyletheramines and polyglycosides. However, it would have been obvious to make the instant composition since the combination of references suggests the composition.

One of ordinary skill in the art would be motivated to combine these references because they disclose components, which are useful for formulating and enhancing the activity of aqueous glyphosate or aminophosphate herbicide compositions.

*Response to Applicants' Argument*

Applicants argue that a showing of unexpected results for the combination of betaine and polyglycoside surfactants with glyphosate yields better control of plant growth with glyphosate than either surfactant alone. Applicants point out that the summary of results recited in Table for Ex 1,2,3, C1,C2 and C3 support the previous statement. The Examiner argues that the results are not a side-by-side comparison since C2 employs far more C8-C10 polyglycoside (7.24 pbw) surfactant than Examples 1,2 and 3 (0.36 pbw and 0.72 pbw and 2.9 pbw). Applicants argue that the present claims are commensurate in scope with the claims. The Examiner maintains that the results are commensurate in scope with the claims. The Examiner points out that glyphosate is the only active tested; C8-C10 alkylpolyglucoside is the only polyglycoside tested, and C12-C14 alkyldimethylbetaine is the only betaine tested. Applicants argue that although the Experimental for Example C2 uses 7.24 pbw C8-C10 polyglycoside is far less than the C8-C10 polyglycoside (0.36 pbw and 0.72 pbw and 2.9 pbw) used in Experimental Example 1,2 and 3. The Applicants further argue that a larger amount of alkylpolyglycoside as used in C2 would be expected to increase the control as compared with a lesser amount of alkylpolyglycoside. The Examiner argues this appears to be the opinion of the Applicants, not supported by evidence.

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The Applicants argue that Sato teaches a long list of surfactant classes that includes betaine derivatives and alkyl glycoside/alkyl polyglycosides. Sato states the surfactants not included in the long list of surfactants may be equally useful. In addition, Sato's examples recite three different surfactants, but not one of the three surfactants is a betaine or glycoside. The preferred embodiments or examples direct an artisan in the field away from the claimed surfactants. Applicants cite Wyril and Burnside to support that the choice of surfactant is critical. The Applicants argue that Keonig teaches that the surfactant may include one or more surfactants. The Applicants further that neither Sato nor Koenig teaches the specific combination of betaine and glycoside.

The Applicants argue that Sato teaches aqueous herbicide compositions comprising elevated concentrations of a specific ammonium salt of glyphosate combined with a surfactant. The Applicants argue that although the Office Action states that neither Sato nor Koenig teach a composition comprising an isopropylamine salt of glyphosate, trialkyl betaines, alkyletheramines and polyglycosides, the Office Action recites, "it would have been obvious to make the instant composition since the combination of references suggests the composition".

The Applicants argue that Sato teaches aqueous herbicide compositions comprising elevated concentrations of a specific ammonium salt of glyphosate combined with a surfactant; wherein the ammonium salt of glyphosate exists at a pH of 6-7.

The Applicants maintain that Sato teaches away from the betaines and alkyl polyglycosides being combined with the glyphosate, because none of the Examples in Sato require either surfactant.

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The Applicants maintain that Koenig teaches away from the betaines and alkyl polyglycosides being combined with the glyphosate, because Koenig teaches that phosphate esters are the preferred surfactants.

The Examiner reiterates that the intent of the Office Action was to relay to the Applicants that although neither reference exemplifies the presently claimed composition individually, the combination of the references does make obvious the instant composition obvious, i.e., the combination of Sato and Koenig, both drawn to herbicidal utility, makes obvious the presently claimed herbicide composition comprising an isopropylamine salt of glyphosate, trialkyl betaines, alkyletheramines and polyglycosides.

The Examiner reiterates that it would have been obvious for an artisan in the field to have tried other glyphosates, including the glyphosates claimed, since the ammonium salt of glyphosate taught by Sato is successfully used in his invention. Furthermore, Sato lists alkyl polyglycosides and betaines as surfactants to be combined with the ammonium glyphosate. The alkyl polyglycosides and betaines are surfactants also recited in instant claims to be combined with presently claimed hydrosoluble salts of glyphosate. Further note, that Koenig suggests the combination of a hydrosoluble salt of glyphosate (isopropylamine salt of glyphosate) with the same surfactants (alkyl polyglycosides and betaines) listed in Sato. Such teachings would make an invention comprising an isopropylamine salt of glyphosate, trialkyl betaines, alkyletheramines and polyglycosides obvious.

The Examiner reiterates that a reference does not have to exemplify all combinations scenarios suggested therein to render a combination obvious. The mere fact that Sato lists betaines

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and alkyl polyglycoside as possible surfactants to be combined with the glyphosate makes the combination obvious.

The Examiner reiterates that Koenig's teaching to phosphate esters as the preferred surfactants does not remove the host of other surfactants from the Koenig reference. The Examiner reiterates that a reference does not have to exemplify all combinations scenarios suggest therein to render a combination obvious. The mere fact that Koenig list betaines and alkyl polyglycoside as possible surfactants to be combined with the glyphosate makes the combination obvious.

The Applicants point the Examiner to Experimental Results to demonstrate that unexpected results are obtained for the instantly claimed composition. The Examiner finds the results unconvincing for the following reasons: 1) No experiments were conducted with alkyl polyglycoside as the only surfactant; 2) No specific alkylbetaines and alkyl polyglycosides appear to be identified in the Examples; 3) The results are not commensurate in scope with the claims; and 4) At page 11 of the specification, the results are not convincing. Example C2 uses 7.24 pbw C8-C10 polyglycoside, whereas inventive examples 1, 2 and 3 employ much less C8-C10 polyglycoside (0.36 pbw and 0.72 and 2.9 pbw). This does not appear to be a side-by-side comparison.

#### **Other Matters**

The WO 04/107861 is not in English, and therefore, WO '861 was not considered.

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***Telephonic Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton N. Pryor whose telephone number is 571-272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alton N. Pryor/  
Primary Examiner, Art Unit 1616